

REMARKS/ARGUMENTS

The present application discloses an apparatus and method wherein a set of live broadcast channels having multiple program formats is automatically selected on a mobile receiver based on the mobile receiver's current location, a database of broadcast sources contained within the mobile receiver, and a predefined set of user preferences. This location based selection of broadcast channels may be implemented by first querying a user for personal preferences. These user preferences, along with a database of broadcast sources and program formats, are then loaded into the mobile receiver. The mobile receiver includes a means for determining the current location of the receiver, as the receiver moves from location to location. After the location of the receiver is determined, the database of broadcast sources and program formats are searched in order to determine broadcast sources that can be received by the receiver in its current location. After the receivable broadcast sources have been identified, one or more groups of broadcast channels are created, based on the set of user preferences. These groups of broadcast channels are then assigned to user selectable functions within the receiver.

Reconsideration of the application, as amended, is requested. Claims 1, 35, and 41 have been amended. No new matter has been added. Claims 1 and 3-41 remain in this application.

In section 3 of the Office Action, the Examiner rejects claims 1 and 3-41 under 35 U.S.C. §103 as being unpatentable over Marrah et al. (U.S. 6,728,522) in view of De Bonet et al. (U.S. 6,985,694). Applicant has amended claims 1, 35, and 41 to further differentiate the claimed invention over the cited prior art, and submits that all claims are now allowable for reasons stated below.

Marrah et al. provides a mobile weather band radio and a method of turning the radio to select a signal channel based on geographic position (Abstract). De Bonet et al. provides an audio element cache that is capable of caching audio elements for each user in a personal radio server system. In operation, customized radio content is provided to remote listeners in a

personal radio server system by: storing a plurality of audio elements in a file server; retrieving a subset of the plurality of audio elements from the filer server by predicting the content desired by a remote listener based on a user profile of the remote listener; storing the subset of the plurality of audio elements in a audio element cache, selecting audio elements to provide to a remote listener from the audio element cache; and transmitting the audio elements to the remote listener (Abstract).

Applicant has modified independent claims 1 and 35 of the present application to now incorporate the limitation of receiving and selecting live AM/FM broadcast signals from a plurality of live broadcast signals having multiple program formats. While the present invention's selection of broadcast signals based on a predetermined selection criteria is designed to work real-time with over-the-air radio broadcasts, the De Bonet et al. reference necessarily stores a plurality of audio elements in a file server, then later retrieves a subset of the audio elements from the file server based upon a user profile, stores the subset of audio elements in a cache, then selects and broadcasts the audio elements to the remote user (Abstract). In contrast to De Bonet et al., the present invention does not require a file server or a cache, since the present invention is intended work with live, over-the-air broadcast signals, rather than stored and cached broadcast segments which are later reassembled for subsequent broadcasts. Thus, the material provided by De Bonet et al. is inherently not live, since it is stored on a file server, reconstructed later in a cache based on a user's profile, then finally retrieved/broadcast to the listener. At best, De Bonet et al. can provide a time shifted, customized broadcast of earlier broadcast material, as opposed to the live, over-the-air broadcasts of the present invention. Further, De Bonet et al. neither discloses nor suggests broadcasting live, over-the-air AM/FM radio signals. De Bonet et al. provides a set of saved audio elements in a file server which are then modified and reassembled for later broadcast. When the so-called "broadcast" occurs in De Bonet. et al., it is a set of previously saved, re-packaged audio elements, which are broadcast over the internet, not via live, over-the-air AM/FM radio signals, as is provided by the current invention.

With regard to Marrah et al., it is directed toward a single program format, namely weather. As stated in the Marrah et al. abstract, it provides “A mobile weather band radio and method of tuning the radio to select a signal channel based on geographic position”. In contrast to Marrah et al., the present invention receives a variety of program formats. As described on page 12 line 26 to page 14, line 4, there are a multitude of potential program formats, including, but not limited to: “ROCK” (page 12, line 30), “JAZZ” (page 13, line 2), “Minnesota Vikings football broadcasts” (page 13, line 20), and “REGGAE” (page 14, line 3). Other examples of program formats is given in the background of the invention on page 1, lines 32-34, which mentions Easy Listening, Jazz, Hard Rock, Religious, Talk Radio, Sports, News, Ethnic, and Children’s Programming. Thus, while Marrah et al. is restricted to receiving and broadcasting material related exclusively to a single format (i.e., weather), the present invention receives a plurality of formats on the signals it receives.

Applicant respectfully submits that neither reference, alone or in combination, discloses nor suggests receiving and selecting “live AM/FM broadcast signals from a plurality of live broadcast signals having multiple program formats” as provided by the current invention. Thus, independent claims 1 and 35 are now submitted as being in condition for allowance. Further, claims 3-34 and 36-41 depend, either directly or indirectly from claims 1 and 35, respectively. Thus, claims 3-34 and 36-41 are also now submitted as being in condition for allowance.

Applicant further respectfully submits that there is no motivation to combine the cited Marrah et al. and De Bonet et al. references. Marrah et al. is exclusively concerned with weather and weather band broadcasts (i.e., a single program format). By contrast, De Bonet et al. deals with a wide array of audio elements (i.e., program formats). Marrah et al. is a live, over-the-air broadcast system, while De Bonet et al. is a server based system. Marrah et al. receives live broadcasts, while De Bonet et al. stores segments of a broadcast on a server for later caching and transmission as a custom, personal radio broadcast on a delayed basis. Applicant submits that there are no synergies that exist between the Marrah et al. and De Bonet et al. references that would suggest combining the two references, since they are so vastly different.

In paragraph 5 of the Office Action, the Examiner states that with regard to claims 3, 28, and 40, Marrah discloses the apparatus and method, wherein the database of broadcast sources further includes program formats for a plurality of broadcast locations, citing Marrah et al., col. 3, lines 45-59 and col. 5, lines 45-50. Applicant respectfully traverses this rejection.

The passages cited by the Examiner refer to multiple frequencies carrying a single program format (i.e., weather). Since all channels (i.e., frequencies) within Marrah et al. carry a single program format (i.e., weather), there is no need to use program formats in the database, and the database indeed has no such entry. Further, the passage states that the database contains “NOAA county identification codes and the corresponding weather band frequency versus GPS coordinates of counties”, but does not in any way describe or suggest a “program format” entry in the database. Thus, while there is a “database” and the database contains “a plurality of broadcast locations”, there is no program format information provided.

In paragraph 6 of the Office Action, the Examiner states that with regard to claim 4, Marrah discloses all of the claim 4 limitations, except the apparatus, wherein the current location of the receiver is entered by the user. The Examiner further states that De Bonet et al. discloses the apparatus, wherein the current location of the receiver is entered by the listener in col. 9-10, lines 67-1 and col. 12-13, lines 56-8. Applicant respectfully traverses the rejection.

The first passage cited by the Examiner merely states, “The user may manually select user preferences”, referring to how often news, sports and traffic should be played. The passage has nothing whatsoever to do with the location of the user. Similarly, the second passage cited by the Examiner has nothing whatsoever to do with the location of the receiver. It merely describes how a user may specify a list of “interests” that relate to topics that the listener would like to hear more about. Applicant respectfully submits that neither passage discloses nor suggests the “location of the receiver” in any context.

In paragraph 7 of the Office Action, the Examiner states that with regard to claims 5, 6, and 38, Marrah discloses all of the limitations, except wherein the current location entered by the listener is a zip code. The Examiner further states that De Bonet et. al. provides an apparatus and method wherein the current location entered by the listener is a zip code (citing col. 11-12 lines 65-5 and col. 12, lines 30-37). Applicant respectfully traverses this rejection.

The “zip code” entered by the user in the passages cited by the Examiner is used to build a user profile containing information about where a user lives, but is not used to indicate where a user is located at any given instant. As described in the second passage cited by the Examiner, this zip code is used to target content (e.g., advertising) to a user based on the user’s demographics (i.e., address of residence). Thus, this information is used to identify a user’s permanent residence, not where a user resides at any given instant.

In paragraph 8 of the Office Action, the Examiner states that with regard to claim 7, Marrah discloses all of the limitations, except wherein the current location entered by the listener is a city name. The Examiner further states that De Bonet et al. provides an apparatus and method wherein the current location entered by the listener is a city name (citing col. 11 lines 15-22 and col. 13 lines 9-20). Applicant respectfully traverses this rejection.

The “city name” entered by the user in the passages cited by the Examiner is used to build a user profile containing information about where a user lives (i.e., home city), but is not used to indicate where a user is located at any given instant. The present invention relies on the fact that the user is mobile, and the device adjusts to where a user is located at any given instant, and is not concerned with a listener’s “permanent address”, as is the case with De Bonet et al.

In paragraph 9 of the Office Action, the Examiner states that with regard to claim 8, Marrah discloses all of the limitations, except wherein the current location entered by the listener is entered by a keypad integral to the apparatus. The Examiner further states that De Bonet provides an apparatus wherein the current location entered by the listener is entered by a keypad

integral to the apparatus citing col. 9-10, lines 67-1 and col. 12-13 lines 56-8). Applicant respectfully traverses this rejection.

Claim 8 depends indirectly from claim 1, which for reasons stated above, is now submitted as being in condition for allowance. Thus, claim 8 is similarly submitted as now being in condition for allowance as well.

In paragraph 10 of the Office Action, the Examiner states that with regard to claim 9, Marrah discloses all of the limitations, except wherein the current location entered by the listener is entered by voice input. The Examiner further states that wherein the current location entered by the listener is entered via a keypad integral to the apparatus (see col. 3, lines 1-10); therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to employ this feature within the system as a way of providing to the listener another method of entering the current location. Applicant respectfully traverses this rejection.

Applicant respectfully submits that the mere fact that Marrah et al. has a keypad integral to the apparatus does not imply, in any way, that voice input would be an obvious extension. If that indeed were the case, there would be some suggestion of the concept in Marrah et al. Likewise, the De Bonet et al. reference neither discloses nor suggests the use of voice input for providing a current location of a listener. Further, De Bonet et al. is only concerned with a listener's permanent address, not where a listener resides at any particular instant.

In paragraph 11 of the Office Action, the Examiner states that with regard to claim 10, 36, and 41, Marrah discloses the apparatus and method wherein the current location of the receiver is provided by a global positioning system (GPS) receiver 40 integral to the apparatus (see col. 3, lines 41-44).

Applicant respectfully submits that claims 10, 36, and 41 rely, either directly or indirectly from claims 1 and 35, respectfully, which for reasons stated above, are now submitted as

allowable. Thus, claims 10, 36, and 41 are also now submitted as being in condition for allowance.

In paragraph 12 of the Office Action, the Examiner states that with regard to claim 11, Marrah discloses an apparatus wherein the current location of the receiver is provided by a global positioning system (GPS) receiver 40 external to the apparatus, citing col. 4, lines 30-41. Applicant respectfully traverses this rejection.

Applicant respectfully submits that the passage cited by the Examiner makes no mention of whether the GPS receiver is external or internal to the apparatus, and, in fact, in Figure 2, the GPS receiver 40 referenced by the Examiner is shown internal to the apparatus 12.

In paragraph 13 of the Office Action, the Examiner states that with regard to claims 12 and 13, Marrah discloses an apparatus wherein the current location of the receiver is provided by a cellular phone integral to the apparatus, citing col. 2, lines 59-63. Applicant respectfully traverses this rejection.

Applicant respectfully submits that the passage cited by the Examiner makes no mention of utilizing a cellular phone integral to the apparatus for determining the location of the receiver.

In paragraph 14 of the Office Action, the Examiner states that Marrah discloses the apparatus, wherein the database of broadcast services are provided to the receiver by a removable memory module, citing col. 5, lines 45-50. Applicant respectfully traverses the rejection.

Applicant respectfully submits that the passage cited by the Examiner makes no mention of a database of broadcast services being provided to the receiver by a removable memory module, and in fact, neither discloses nor suggests removable memory modules in any context.

In paragraph 15 of the Office Action, the Examiner states that Marrah discloses all of claims 15, 16 and 17 limitations, except the apparatus, wherein the database of broadcast services is provided to the receiver by a CD-ROM disc, a CD-RW disc, or a writable DVD. The Examiner further states that Marrah, however, does disclose the apparatus wherein the database of broadcast services is provided to the receiver by a removable memory module, citing col. 5, lines 45-50. Applicant respectfully traverses the rejection.

As stated previously, Applicant respectfully submits that the passage cited by the Examiner makes no mention of a database of broadcast services being provided to the receiver by a removable memory module, and in fact, neither discloses nor suggests removable memory modules in any context.

In paragraph 16 of the Office Action, the Examiner states with regard to claims 18 and 27, that Marrah discloses an apparatus wherein the apparatus further includes an I/O port for transferring information from an external device to the apparatus, citing col. 3, lines 31-44 and col. 4, lines 30-41.

Applicant respectfully submits that claims 18 and 27 rely, either directly or indirectly from claim 1, respectfully, which for reasons stated above, is now submitted as allowable. Thus, claims 18 and 27 are also now submitted as being in condition for allowance.

In paragraph 17 of the Office Action, the Examiner states that with regard to claim 19, that Marrah discloses an apparatus wherein the external device is coupled to the I/O port via a wired connection, citing col. 2, lines 52-59. Applicant respectfully traverses the rejection.

Applicant respectfully submits that the passage cited by the Examiner neither discloses nor suggests an I/O port of the apparatus coupled to an external device via a wired connection, as claimed by the Examiner.

In paragraph 18 of the Office Action, the Examiner states that with regard to claims 20, 21, and 22, Marrah discloses the apparatus, wherein the external device is coupled to the I/O port via a wireless connection, citing col. 2, lines 59-63. Applicant respectfully traverses the rejection.

Applicant respectfully submits that the passage cited by the Examiner neither discloses nor suggests an I/O port of the apparatus coupled to an external device via a wireless connection, as claimed by the Examiner.

In paragraph 19 of the Office Action, the Examiner states that with regard to claim 23, Marrah discloses all of the claim 23 limitations, except the apparatus, wherein the external device is a personal digital assistant (PDA). The Examiner further states that De Bonet, however, discloses the apparatus, wherein the external device is a personal digital assistant (PDA), citing col. 8, lines 15-18.

Applicant respectfully submits that claim 23 relies indirectly from claim 1, which for reasons stated above, is now submitted as allowable. Thus, claim 23 is also now submitted as being in condition for allowance.

In paragraph 20 of the Office Action, the Examiner states that with regard to claim 24, Marrah discloses all of the claim 24 limitations, except the apparatus, wherein the external device is a personal computer. The Examiner further states that De Bonet, however, discloses the apparatus, wherein the external device is a personal computer, citing col. 8, lines 15-18.

Applicant respectfully submits that claim 24 relies indirectly from claim 1, which for reasons stated above, is now submitted as allowable. Thus, claim 24 is also now submitted as being in condition for allowance.

In paragraph 21 of the Office Action, the Examiner states that with regard to claim 25, Marrah discloses all of the claim 25 limitations, except the apparatus, wherein the external device is a wireless phone. The Examiner further states that De Bonet, however, discloses the apparatus, wherein the external device is a wireless phone, citing col. 8, lines 15-18.

Applicant respectfully submits that claim 25 relies indirectly from claim 1, which for reasons stated above, is now submitted as allowable. Thus, claim 25 is also now submitted as being in condition for allowance.

In paragraph 22 of the Office Action, the Examiner states that with regard to claim 33, Marrah discloses the apparatus wherein the receiver is mounted within a mobile vehicle, citing Fig. 2.

Applicant respectfully submits that claim 33 relies indirectly from claim 1, which for reasons stated above, is now submitted as allowable. Thus, claim 33 is also now submitted as being in condition for allowance.

In paragraph 23 of the Office Action, the Examiner states that with regard to claims 34 and 37, Marrah discloses all of the claim 34 and 37 limitations, except the apparatus and method, wherein the receiver is a hand-held device. The Examiner further states that De Bonet discloses the apparatus and method, wherein the receiver is a hand-held device (see col. 8, lines 15-18).

Applicant respectfully submits that claims 34 and 37 rely either directly or indirectly from claims 1 and 35, which for reasons stated above, are now submitted as allowable. Thus, claims 34 and 37 are also now submitted as being in condition for allowance.

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In view of the foregoing comments and amendments, the Applicant respectfully submits that all of the pending claims (i.e., claims 1 and 3-41) are in condition for allowance and that the application should be passed to issue. The Examiner is urged to call the undersigned at the below-listed telephone number if, in the Examiner's opinion, such a phone conference would expedite or aid in the prosecution of this application.

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